

**NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES**

JANUARY 17, 2012

CALL TO ORDER / ANNOUNCEMENTS

The NCI-Frederick Institutional Biosafety Committee was convened at 12:05 p.m. in Building 549 Executive Board Room with the following members in attendance:

Voting (Quorum = 8)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Michael Baseler | <input checked="" type="checkbox"/> Sarah Hooper |
| <input checked="" type="checkbox"/> Theresa Bell | <input checked="" type="checkbox"/> Serguei Kozlov |
| <input checked="" type="checkbox"/> Rev. David Betzner | <input checked="" type="checkbox"/> Dan McVicar (Chair) |
| <input checked="" type="checkbox"/> Stephen Creekmore | <input checked="" type="checkbox"/> Randall Morin |
| <input checked="" type="checkbox"/> Bruce Crise (left at 2:00pm) | <input type="checkbox"/> Shalini Oberdoerffer (regrets) |
| <input checked="" type="checkbox"/> Eric Freed | <input checked="" type="checkbox"/> Raja Sriperumbudur |
| <input type="checkbox"/> Melinda Hollingshead (regrets) | <input type="checkbox"/> Lucien Winegar (regrets) |
| <input checked="" type="checkbox"/> Stephen Hughes | |

Non-Voting

- Walter Hubert
 Kim DiGiandomenico

APPROVAL OF MINUTES FROM DECEMBER 20, 2011 MEETINGS

The December 20, 2011 meeting minutes were approved as written.
(A motion and second were made. (For: 12 Against: 0 Abstain: 0)

ACCIDENT REVIEWS

REVIEW OF PROTOCOLS

NEW REGISTRATIONS

Patricia Steeg / Jean-Claude Marshall 12-03: *Effect of Cytokine Receptor Gene IL11RA Overexpression on Metastatic Breast Cancer Progression* This group plans to use the well established MDA-MB-231T model system to determine the *in vivo* role of IL11RA, a cytokine receptor gene, plays in determining metastatic progression. The lead reviewers noted some revisions that were made during the pre-review but that were not reflected in the final registry. With these revisions, Bruce Crise moved to approve the registry. Eric Freed seconded the motion. For: 12; Against: 0; Abstain: 0

RENEWALS

Mary Carrington 12-01 (08-78): *Effects of genetic polymorphism at the MHC (major histocompatibility complex), KIR (killer cell immuno-globulin like receptor) gene cluster and related loci on human disease* This is a renewal registry for the HLA immunogenetics laboratory and the core laboratory of the Cancer and Inflammation Program at NCI-Frederick. The group will extract DNA and RNA from cell lines and white blood cells isolated from human blood samples. The DNA and RNA samples will be used for genotype analyses, SNP analysis, regulation of gene expression and gene copy number.

NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
January 17, 2012

The data will be used for association studies in HIV or other diseases. The group will process everything that is manipulated in the laboratory following BSL2* practices. This registry does not cover any cell culturing. Eric Freed moved to approve the registry. Bruce Crise seconded the motion. For: 12 Against: 0 Abstain: 0

Stan Kaczmarczyk 12-02 (07-27): 1). Generation of reporter cell lines line using retroviral transduction methods; 2). Generation of virus like particles (VLPs) for intra-tumoral protein delivery; 3). Incorporation of alphavirus replicon into virus like particles (VLPs) Dan McVicar motioned to defer the registry for the following clarifications:

1. The Sindbis VLPs should not be put into animals until the following clarification is received and approved. Do you have (in house) experimental evidence for the Sindbis system to support that the replicon does not expand in culture and therefore, it would not be anticipated to expand in vivo?
2. The committee has requested a more specific list of what will be put into the VLPs (currently, it appears that this is only GFP, Cre and TRAIL) and also a list of what you will not put into this system (i.e. you will not put any known oncogenes into the system).
3. The committee would like you to discuss the payload effects should a lab accident occur and an individual is autoinoculated. For instance, what would you expect from the delivery of the cargo VLPs if an individual was autoinoculated?
4. The committee has concerns with the terminology of the Sindbis construct being referred to as a VLP. If you are packaging a large portion of viral genome into a viral particle, should this be referred to as a pseudotyped vector rather than a VLP because it is delivering genetic material rather than a portion of a protein?
5. The committee would like you to address the safety concerns with endogenous murine virus (primarily for the in vivo experiments). Endogenous murine viruses could recognize the MLV packaging signal and mobilize the Sindbis genome.

Bruce Crise seconded the motion. For: 12; Against: 0; Abstain: 0

Dennis Klinman 12-05 (08-50): In vivo tumor models used in the study of vaccines and modulators of the innate immune system This lab continues to study the ability of various combinations of vaccines, adjuvants, and immune modulators on the ability of mice to resist/reject cancer. The current document serves to renew their request to use various cancer cell lines in these animal models. The lead reviewers had additional questions for the PI to address regarding what materials were being injected into animals (murine vs human cell lines) and who the laboratory staff were. Serguei Kozlov motioned to conditionally approve the registry pending responses to lead reviewer questions with final approval by lead reviewers. Raja Sriperumbudur seconded the motion. For: 12; Against: 0; Abstain: 0

BREEDING PROTOCOLS – Approved with notification to committee

Robert Callahan 12-04 (06-47): *Mammary Gland Transgenic Mouse Breeding Colony*
Jeffrey Green 12-07 (05-40): *Derivation and Analysis of Genetically-Engineered Mice*
Lawrence Samelson 12-08 (09-01): *T cell antigen receptor signaling*
David Salomon 12-11: *Mammary Gland Transgenic Mouse Breeding Colony*
Yinling Hu 12-13 (08-62): *Role of IKKa in cancer and inflammation, Role of IKKa in immunity*

OUTSTANDING ITEMS

R. Gorelick 11-03-A1 – Hepatitis C Virus work - Lead reviewer requested full committee review (Documents posted on SharePoint) PI provided updates to registry/SOP; Mock observation was conducted on 01/11/12 with Theresa Bell and Kim DiGiandomenico and a second observation with Steve Hughes and Steve

NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
January 17, 2012

Creekmore occurred on 01/19/12. Pending successful completion of the second mock, approval would be released. (Post-meeting note: approval released on 01/26/12).

James Phang 11-69 (08-60): *The proline metabolism in cancer and other diseases* After reviewing the revised registration, the IBC requested for the PI to acknowledge in section A3 (hazards involved with the protocol) that if the adenoviral vector is tested for replication competent adenovirus at 1E+4pfu/ml, there is a high likelihood that there is RCA on the plates being transferred for analysis on the Seahorse. For this reason, the plates should be handled with extreme caution and anyone other than the PI who may be handling the plates should be made aware of this. Additionally, the committee requested for the plates to be submerged in freshly prepared 10% bleach for at least 10 minutes prior to disposal as biohazardous waste. Dan McVicar motioned that with concurrence from the PI and final approval from Bruce Crise, Steve Hughes, and himself, the approval can be released. Steve Creekmore seconded the motion. For: 12; Against: 0; Abstain: 0

Frank Cuttitta 11-70: *In Vitro/In Vivo Models of Angiogenesis/Lymphangiogenesis – used to assess anti-angiogenic or anti-lymphangiogenic compounds for the potential clinical management of malignant disease* Theresa Bell confirmed LASP practices with Chuck Ostermeier and Jim Stull. No remaining concerns with registry remained and approval was released.

Robin Dewar 11-60 (P080494MBA03, P080201RDA02, P080201RDB02): *Virus Isolation and Serology Laboratory: Work with Clinical Specimens from Patients Infected with the Bloodborne Pathogens, Human Immunodeficiency Virus Type I and Type II, Hepatitis B Virus and Hepatitis C Virus* Theresa Bell and Kim DiGiandomenico visited facility on 01/06/12 – no outstanding concerns. Committee concurred to release approval.

Jonathan Keller 11-57 (08-67): *Transduction of human hematopoietic cells and cell lines with replication incompetent retroviral vectors* Waiting for clarifications from PI (Post-meeting note: clarifications were received and approval was released).

Jonathan Keller 11-58 (08-72): *Hematopoietic Stem and Leukemic Gene Investigation (General Cloning-no viral vectors)* Waiting for clarifications from PI (Post-meeting note: clarifications were received and approval was released).

Trinchieri/Noer – IBC 11-66 (formerly 10-60) *Flow cytometry core lab*: matrix and request form distributed at December 2011 meeting by Dan McVicar. Discussion tabled in December so that committee has a time to review and comment. Committee reviewed and submitted comments to Dr. McVicar. Finalized matrix, request form and IBC registration will be provided to the committee in February for full committee review.

AMENDMENTS

Seventeen amendments were processed and approved between the December 2011 and January 2012 IBC meetings.

OTHER BUSINESS

- *BSC training* – Theresa Bell notified the committee that EHS has purchased an ESCO Class II A2/B2 biosafety cabinet (BSC) and it will be located to the 426 training room. A formal training program has not been established; however, a DVD is currently being utilized on an ‘as requested’ basis. The goal is to couple the DVD with a real-time demo of the proper use of a BSC and how it can fail.
- *IBC web-registration* – Dan McVicar asked about the status of the web-registration form and if there was a deadline provided for production. Kim DiGiandomenico informed the committee that progress was being made, and she was meeting with DMS on January 31, 2012 to discuss progress.

NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
January 17, 2012

Dr. McVicar was invited at this time to attend. A deadline of June 2012 (for beta testing) would be given to DMS for the web-registration program.

- *Human / Murine cell lines and animal biosafety level determinations* (tabled due to time)
- *Medical surveillance and monitoring for EBV, CMV, XMRV* (all tabled due to time)

ADJOURNMENT

The meeting was adjourned at 2:30pm.

Next meetings:

February 21, 2012

March 20, 2012